

CRF Errors Corrected by the STIC Systems Branch
Sortal Number: 09/786,214 **ENTERED** CRF Processing Date: 8/17/2001
Edited by: JA Verified by: JA (STIC star: JA)

- ☐ Changed a file from non-ASCII to ASCII
- ☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line.
- ☐ Edited a format error in the Current Application Data section, specifically: _____
- ☐ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other _____
- ☐ Added the mandatory heading and subheadings for "Current Application Data".
- ☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.
- ☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically: _____
- ☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were: _____
- ☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited: _____
- ☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.
- ☐ Inserted colons after headings/subheadings. Headings edited included: _____
- ☐ Deleted extra, invalid, headings used by an applicant, specifically: _____
- ☐ Deleted: ☐ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filenam at end of file; ☐ page numbers throughout text; ☐ other invalid text, such as _____
- ☐ Inserted mandatory headings, specifically: _____
- ☐ Corrected an obvious error in the response, specifically: _____
- ☐ Edited identifiers where upper case is used but lower case is required, or vice versa.
- ☐ Corrected an error in the Number of Sequences field, specifically: _____
- ☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.
- ☐ Deleted *ending* stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: _____
- ☒ Other: Seq 24 - corrected amino acid nos.

Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form. 3/1/95

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/786,214

DATE: 08/07/2001
 TIME: 17:49:28

Input Set : A:\Pto.amc
 Output Set: N:\CRF3\08072001\I786214.raw

```

3 <110> APPLICANT: Ludwig Institute for Cancer Research
5 <120> TITLE OF INVENTION: AN ANTIGENIC PEPTIDE ENCODED BY AN ALTERNATIVE OPEN READING
FRAME OF
6 HUMAN MACROPHAGE COLONY-STIMULATING FACTOR
8 <130> FILE REFERENCE: L0461/7040WO
C--> 10 <140> CURRENT APPLICATION NUMBER: US/09/786,214
C--> 10 <141> CURRENT FILING DATE: 2001-06-14
10 <160> NUMBER OF SEQ ID NOS: 51
12 <170> SOFTWARE: FastSEQ for Window Version 3.0
14 <210> SEQ ID NO: 1
15 <211> LENGTH: 43
16 <212> TYPE: DNA
17 <213> ORGANISM: Homo sapiens
19 <220> FEATURE:
20 <221> NAME/KEY: misc_feature
21 <222> LOCATION: 43..43
22 <223> OTHER INFORMATION: nucleotide can be a, c, t, or g
24 <400> SEQUENCE: 1
W--> 25 ataagaatgc ggccgctaaa ctattttttt ttttttttt tvn 43
27 <210> SEQ ID NO: 2
28 <211> LENGTH: 25
29 <212> TYPE: DNA
30 <213> ORGANISM: Homo sapiens
32 <400> SEQUENCE: 2 25
33 cgggatccgc cgagatgcgg gtcac
35 <210> SEQ ID NO: 3
36 <211> LENGTH: 30
37 <212> TYPE: DNA
38 <213> ORGANISM: Homo sapiens
40 <400> SEQUENCE: 3 30
41 cggaattctc aggcattaca agcgaatgaga
43 <210> SEQ ID NO: 4
44 <211> LENGTH: 78
45 <212> TYPE: DNA
46 <213> ORGANISM: Homo sapiens
48 <220> FEATURE:
49 <221> NAME/KEY: CDS
50 <222> LOCATION: 1..75
52 <400> SEQUENCE: 4
53 atg gct ggg ctc cct gct gtt gtt ggt ctg tct cct ggc gag cag gag 48
54 Met Ala Gly Leu Pro Ala Val Val Gly Leu Ser Pro Gly Glu Gln Glu
55 1 5 10 15
56 tat cac cga gga ggt gtc gga gta ctg tag 78
57 Tyr His Arg Gly Gly Val Gly Val Leu
58 20 25
60 <210> SEQ ID NO: 5
61 <211> LENGTH: 25
62 <212> TYPE: PRT

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63 <213> ORGANISM: Homo sapiens
65 <400> SEQUENCE: 5
66 Met Ala Gly Leu Pro Ala Val Val Gly Leu Ser Pro Gly Glu Gln Glu
67   1               5               10               15
68 Tyr His Arg Gly Gly Val Gly Val Leu
69   20               25
71 <210> SEQ ID NO: 6
72 <211> LENGTH: 33
73 <212> TYPE: DNA
74 <213> ORGANISM: Homo sapiens
76 <400> SEQUENCE: 6
77 actgggcgga tcctgccctc ccacgacatg gct
80 <210> SEQ ID NO: 7
81 <211> LENGTH: 36
82 <212> TYPE: DNA
83 <213> ORGANISM: Homo sapiens
85 <400> SEQUENCE: 7
86 actgcccga ttcgtcacga ggtctccatc tgactg
88 <210> SEQ ID NO: 8
89 <211> LENGTH: 60
90 <212> TYPE: DNA
91 <213> ORGANISM: Homo sapiens
93 <220> FEATURE:
94 <221> NAME/KEY: CDS
95 <222> LOCATION: 1..60
97 <400> SEQUENCE: 8
98 atg gct ggg ctc cct gct gtt gtt ggt ctg tct cct ggc gag cag gag
99 Met Ala Gly Leu Pro Ala Val Val Gly Leu Ser Pro Gly Glu Gln Glu
100   1               5               10               15
101 tat cac cga gga
102 Tyr His Arg Gly
103   20
105 <210> SEQ ID NO: 9
106 <211> LENGTH: 20
107 <212> TYPE: PRT
108 <213> ORGANISM: Homo sapiens
110 <400> SEQUENCE: 9
111 Met Ala Gly Leu Pro Ala Val Val Gly Leu Ser Pro Gly Glu Gln Glu
112   1               5               10               15
113 Tyr His Arg Gly
114   20
116 <210> SEQ ID NO: 10
117 <211> LENGTH: 33
118 <212> TYPE: DNA
119 <213> ORGANISM: Homo sapiens
121 <400> SEQUENCE: 10
122 actgcccga ttcctatcctc ggtgatactc ctg
124 <210> SEQ ID NO: 11
125 <211> LENGTH: 42

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126 <212> TYPE: DNA
127 <213> ORGANISM: Homo sapiens
129 <220> FEATURE:
130 <221> NAME/KEY: CDS
131 <222> LOCATION: 1..42
133 <400> SEQUENCE: 11
134   ctc cct gct gtt gtt ggt ctg tct cct ggc gag cag gag tat      42
135   Leu Pro Ala Val Val Gly Leu Ser Pro Gly Glu Gln Glu Tyr
136   1             5             10
138 <210> SEQ ID NO: 12
139 <211> LENGTH: 14
140 <212> TYPE: PRT
141 <213> ORGANISM: Homo sapiens
143 <400> SEQUENCE: 12
144   Leu Pro Ala Val Val Gly Leu Ser Pro Gly Glu Gln Glu Tyr
145   1             5             10
147 <210> SEQ ID NO: 13
148 <211> LENGTH: 13
149 <212> TYPE: PRT
150 <213> ORGANISM: Homo sapiens
152 <400> SEQUENCE: 13
153   Pro Ala Val Val Gly Leu Ser Pro Gly Glu Gln Glu Tyr
154   1             5             10
156 <210> SEQ ID NO: 14
157 <211> LENGTH: 13
158 <212> TYPE: PRT
159 <213> ORGANISM: Homo sapiens
161 <400> SEQUENCE: 14
162   Leu Pro Ala Val Val Gly Leu Ser Pro Gly Glu Gln Glu
163   1             5             10
165 <210> SEQ ID NO: 15
166 <211> LENGTH: 15
167 <212> TYPE: PRT
168 <213> ORGANISM: Homo sapiens
170 <400> SEQUENCE: 15
171   Ala Gly Leu Pro Ala Val Val Gly Leu Ser Pro Gly Glu Gln Glu
172   1             5             10             15
174 <210> SEQ ID NO: 16
175 <211> LENGTH: 9
176 <212> TYPE: PRT
177 <213> ORGANISM: Homo sapiens
179 <400> SEQUENCE: 16
180   Glu Ala Asp Pro Thr Gly His Ser Tyr
181   1             5
183 <210> SEQ ID NO: 17
184 <211> LENGTH: 9
185 <212> TYPE: PRT
186 <213> ORGANISM: Homo sapiens
188 <400> SEQUENCE: 17

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189 Ser Ala Tyr Gly Glu Pro Arg Lys Leu
190      1              5
192 <210> SEQ ID NO: 18
193 <211> LENGTH: 9
194 <212> TYPE: PRT
195 <213> ORGANISM: Homo sapiens
197 <400> SEQUENCE: 18
198 Glu Val Asp Pro Ile Gly His Leu Tyr
199      1              5
201 <210> SEQ ID NO: 19
202 <211> LENGTH: 9
203 <212> TYPE: PRT
204 <213> ORGANISM: Homo sapiens
206 <400> SEQUENCE: 19
207 Phe Leu Trp Gly Pro Arg Ala Leu Val
208      1              5
210 <210> SEQ ID NO: 20
211 <211> LENGTH: 10
212 <212> TYPE: PRT
213 <213> ORGANISM: Homo sapiens
215 <400> SEQUENCE: 20
216 Met Glu Val Asp Pro Ile Gly His Leu Tyr
217      1              5              10
219 <210> SEQ ID NO: 21
220 <211> LENGTH: 9
221 <212> TYPE: PRT
222 <213> ORGANISM: Homo sapiens
224 <400> SEQUENCE: 21
225 Ala Ala Arg Ala Val Phe Leu Ala Leu
226      1              5
228 <210> SEQ ID NO: 22
229 <211> LENGTH: 8
230 <212> TYPE: PRT
231 <213> ORGANISM: Homo sapiens
233 <400> SEQUENCE: 22
234 Tyr Arg Pro Arg Pro Arg Arg Tyr
235      1              5
237 <210> SEQ ID NO: 23
238 <211> LENGTH: 10
239 <212> TYPE: PRT
240 <213> ORGANISM: Homo sapiens
242 <400> SEQUENCE: 23
243 Ser Pro Ser Ser Asn Arg Ile Arg Asn Thr
244      1              5              10
246 <210> SEQ ID NO: 24
247 <211> LENGTH: 9
248 <212> TYPE: PRT
249 <213> ORGANISM: Homo sapiens
251 <400> SEQUENCE: 24

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252 Val Leu Pro Asp Val Phe Ile Arg Cys
253 1 5
255 <210> SEQ ID NO: 25
256 <211> LENGTH: 10
257 <212> TYPE: PRT
258 <213> ORGANISM: Homo sapiens
260 <400> SEQUENCE: 25
261 Val Leu Pro Asp Val Phe Ile Arg Cys Val
262 1 5 10
264 <210> SEQ ID NO: 26
265 <211> LENGTH: 9
266 <212> TYPE: PRT
267 <213> ORGANISM: Homo sapiens
269 <400> SEQUENCE: 26
270 Glu Glu Lys Leu Ile Val Val Leu Phe
271 1 5
273 <210> SEQ ID NO: 27
274 <211> LENGTH: 9
275 <212> TYPE: PRT
276 <213> ORGANISM: Homo sapiens
278 <400> SEQUENCE: 27
279 Glu Glu Lys Leu Ser Val Val Leu Phe
280 1 5
282 <210> SEQ ID NO: 28
283 <211> LENGTH: 10
284 <212> TYPE: PRT
285 <213> ORGANISM: Homo sapiens
287 <400> SEQUENCE: 28
288 Ala Cys Asp Pro His Ser Gly His Phe Val
289 1 5 10
291 <210> SEQ ID NO: 29
292 <211> LENGTH: 10
293 <212> TYPE: PRT
294 <213> ORGANISM: Homo sapiens
296 <400> SEQUENCE: 29
297 Ala Arg Asp Pro His Ser Gly His Phe Val
298 1 5 10
300 <210> SEQ ID NO: 30
301 <211> LENGTH: 9
302 <212> TYPE: PRT
303 <213> ORGANISM: Homo sapiens
305 <400> SEQUENCE: 30
306 Ser Tyr Leu Asp Ser Gly Ile His Phe
307 1 5
309 <210> SEQ ID NO: 31
310 <211> LENGTH: 9
311 <212> TYPE: PRT
312 <213> ORGANISM: Homo sapiens
314 <400> SEQUENCE: 31

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VERIFICATION SUMMARY

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Input Set : A:\Pto.amc

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L:10 M:270 C: Current Application Number differs, Replaced Current Application No

L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:25 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1